

INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 03/01045

A. CLASSIFICATION OF SUBJECT MATTER		
IPC7: C07C 253/00, C07C 255/57, C07C 255/52, C07C 233/67, C07C 233/65, C07D 309/38 According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols)		
IPC7: C07C		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
SE,DK,FI,NO classes as above		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)		
EPO-INTERNAL, WPI DATA, CHEM. ABS DATA, PAJ		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	J. Med. Chem., Vol 45, no. 18, 2002, Jeffrey S. Albert et al: "Design, Synthesis, and SAR of Tachykinin Antagonists: Modulation of Balance in NK1/NK2 Receptor Antagonist Activity", page 3972 - page 3983; page 3973, Scheme 2; page 3980 - page 3981, nos. 18-20 --	1,3
A	WO 0177069 A1 (ASTRAZENECA AB), 18 October 2001 (18.10.01), page 15, line 19 - page 16, line 14 --	1,3
A	WO 0059873 A1 (ASTRAZENECA AB), 12 October 2000 (12.10.00), page 13, line 19 - page 14, line 15 --	1,3
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
<p>* Special categories of cited documents:</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"&" document member of the same patent family</p>		
Date of the actual completion of the international search		Date of mailing of the international search report
10 October 2003		14-10-2003
Name and mailing address of the ISA/ Swedish Patent Office Box 5055, S-102 42 STOCKHOLM Facsimile No. +46 8 666 02 86		Authorized officer Gerd Strandell/Eö Telephone No. +46 8 782 25 00

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 0020003 A1 (ZENECA LIMITED), 13 April 2000 (13.04.00), page 21, line 29 - page 22, line 26 --	1,3
A	WO 0020389 A1 (ZENECA LIMITED), 13 April 2000 (13.04.00), page 24, line 25 - page 25, line 23 --	1,3
A	WO 0212168 A1 (ASTRAZENECA AB), 14 February 2002 (14.02.02), page 16, line 20 - page 17, line 17 --	1,3
A	WO 0177089 A1 (ASTRAZENECA AB), 18 October 2001 (18.10.01), page 29, line 20 - page 30; page 32, line 11 - page 34, line 6 --	1,3
A	STN International, File CASREACT, Accession no. 44:10012, Richtzenhain, Hermann et al: "Substitution reactions with metalloorganic compounds. IV. The Grignardization of methoxyl-containing aromatic nitriles"; & Chem. Ber. (1949), 82, 408-17 --	3,7,8
A	WO 8906645 A1 (ABBOTT LABORATORIES), 27 July 1989 (27.07.89), page 10; page 34, Example 52 --	10
A	US 2948724 A (MELVILLE SAHYUN ET AL), 9 August 1960 (09.08.60), column 1, line 60 - column 2, line 57; column 11, line 38 - line 55 --	4,6-8,10
A	Journal of the American Chemical Society, Vol. 97, no. 8, April 1975, W. Adcock et al: "Substituent Effects. XII.1 Substituent Effects by 19F NMR", page 2198 - page 2205 -- -----	10

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Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see next sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
1-8, 10

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
☐ No protest accompanied the payment of additional search fees.

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According to Article 34 (3) (a-c) and Rule 13.2, an international application shall relate to one invention only or to a group of inventions linked by one or more of the same or corresponding "special technical features", i.e. features that define a contribution which each of the inventions makes over the prior art. In order to fulfil the requirements of unity of invention, it is necessary that the intermediate compounds are closely interconnected with the end products as well as with themselves. Such close connection requires that the essential structural part of the end product is incorporated by the intermediate. However, the present application lacks a single general inventive concept based on the above principle. This leads to the presence of the subjects listed below, each falling under its own restricted inventive concept.

1. Claims 1-8 and 10. Process for preparing compounds of formula (I), intermediates of formula (12) and preparation thereof, intermediates of formulae (20), (18) and (63).
2. Claim 9. Intermediate of formula (27).

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Patent document cited in search report			Publication date	Patent family member(s)		Publication date
WO	0177069	A1	18/10/01	AU	4499901 A	23/10/01
				EP	1278719 A	29/01/03
				GB	0009457 D	00/00/00
				US	2003158180 A	21/08/03
				GB	0009456 D	00/00/00
WO	0059873	A1	12/10/00	AU	3569200 A	23/10/00
				BG	106074 A	31/05/02
				BR	0009582 A	26/12/01
				CA	2368240 A	12/10/00
				CN	1345307 T	17/04/02
				CZ	20013574 A	15/05/02
				EE	200100520 A	16/12/02
				EP	1169302 A	09/01/02
				GB	9907571 D	00/00/00
				HU	0200707 A	29/06/02
				IL	145645 D	00/00/00
				JP	2002541137 T	03/12/02
				NO	20014855 A	06/12/01
				PL	350568 A	16/12/02
				SK	13012001 A	04/04/02
				TR	200102875 T	00/00/00
				US	6476077 B	05/11/02
				US	6586432 B	01/07/03
				US	2003092713 A	15/05/03
WO	0020003	A1	13/04/00	AT	230598 T	15/01/03
				AU	4637899 A	01/02/00
				AU	6111099 A	26/04/00
				BR	9912013 A	10/04/01
				BR	9914333 A	26/06/01
				CA	2336806 A	20/01/00
				CA	2344807 A	13/04/00
				CN	1309638 T	22/08/01
				CN	1322134 T	14/11/01
				DE	69904847 D	00/00/00
				EP	1097137 A	09/05/01
				EP	1119355 A,B	01/08/01
				SE	1119355 T3	
				GB	9821703 D	00/00/00
				GB	9914886 D	00/00/00
				GB	9922519 D	00/00/00
				IL	140770 D	00/00/00
				IL	142048 D	00/00/00
				JP	2002520316 T	09/07/02
				JP	2002526410 T	20/08/02
				NO	20010151 A	05/03/01
				NO	20011766 A	05/06/01
				US	6365602 B	02/04/02
				US	6500818 B	31/12/02
				WO	0002859 A	20/01/00
				ZA	200102658 A	01/07/02
				GB	9905238 D	00/00/00

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International application No.

PCT/SE 03/01045

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 0020389 A1	13/04/00	AU 4637899 A	01/02/00
		AU 6111199 A	26/04/00
		BR 9912013 A	10/04/01
		BR 9915904 A	21/08/01
		CA 2336806 A	20/01/00
		CA 2345133 A	13/04/00
		CN 1309638 T	22/08/01
		CN 1322196 T	14/11/01
		EP 1097137 A	09/05/01
		EP 1119551 A	01/08/01
		GB 9821699 D	00/00/00
		GB 9914886 D	00/00/00
		GB 9922521 D	00/00/00
		IL 140770 D	00/00/00
		IL 142045 D	00/00/00
		JP 2002520316 T	09/07/02
		JP 2002526527 T	20/08/02
		NO 20010151 A	05/03/01
		NO 20011765 A	07/06/01
		US 6365602 B	02/04/02
		WO 0002859 A	20/01/00
		ZA 200102651 A	01/07/02
		GB 9906278 D	00/00/00
		GB 9909839 D	00/00/00
WO 0212168 A1	14/02/02	AU 8456801 A	18/02/02
		BR 0112957 A	08/07/03
		CA 2415467 A	14/02/02
		EP 1307425 A	07/05/03
		GB 0019008 D	00/00/00
		NO 20030509 A	24/03/03
WO 0177089 A1	18/10/01	AU 4699901 A	23/10/01
		EP 1276729 A	22/01/03
		GB 0008728 D	00/00/00
		GB 0008727 D	00/00/00

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Patent document cited in search report			Publication date	Patent family member(s)	Publication date	
WO	8906645	A1	27/07/89	CA	1337425 A,C	24/10/95
				DE	68909253 D,T	24/02/94
				EP	0325963 A,B	02/08/89
				SE	0325963 T3	
				EP	0395734 A	07/11/90
				ES	2059570 T	16/11/94
				JP	2693843 B	24/12/97
				JP	4500356 T	23/01/92
				MX	9203464 A	01/09/92
				US	5086074 A	04/02/92
				US	5128362 A	07/07/92
				US	5140040 A	18/08/92
<hr/>						
US	2948724	A	09/08/60	NONE		
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